

CLAIMS

1. A method of producing aesthetic color print output, comprising:
modifying a first error value to produce a first modified error value; and
basing a color plane firing decision on a comparison of the first
5 modified error value and a second error value.

2. The method of claim 1, wherein modifying comprises:
using a function to derive an error modification value; and
multiplying the error modification value with the first error value in
10 response to a value in a bitmap.

3. The method of claim 2, wherein an input value to the function is a
minority color plane value.

4. The method of claim 1, wherein modifying comprises multiplying
15 the first error value and the second error value by a fraction derived from a
matrix.

5. The method of claim 1, additionally comprising distributing
20 fractional portions of the first error value and the second error value to
locations on a first color plane and a second color plane, respectively.

6. The method of claim 5 wherein distributing comprises using a
weight format to determine the fractional portions.

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7. The method of claim 6 additionally comprising selecting the weight format based on a magnitude of a first color plane value.

8. A method of processing color plane information, comprising:

5 modifying first and second error values to produce first and second modified error values, respectively;

basing a color plane firing decision on a comparison of the first modified error value and the second modified error value; and

10 distributing portions of the first and second error values to adjacent pixel locations on first and second color planes, respectively.

9. The method of claim 8, wherein modifying comprises:

using a function to derive an error modification value; and

15 multiplying the error modification value with the first error value in response to a value in a bitmap.

10. The method of claim 9, wherein an input value to the function is a minority color plane value.

20 11. The method of claim 8, wherein modifying comprises multiplying the first error value and the second error value by a number derived from a matrix.

12. The method of claim 8, wherein modifying comprises multiplying the first error value and the second error value by a number derived from a matrix if the first and second color plane values are greater than the matrix value and greater than the inverse matrix value, respectively.

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13. The method of claim 8 wherein distributing comprises using a weight format to determine the portions.

10 14. The method of claim 13 additionally comprising selecting the weight format based on a magnitude of a first color plane value.

15 15. A system for producing color print output, comprising:
a halftoning module to calculate error, to calculate modified error and to base a firing decision on the modified error; and
an error format by which the error is distributed.

20 16. A system, comprising:
a halftoning module to calculate error, to calculate a modified error and to base a firing decision on the modified error;
an error modification function to provide a number by which error is multiplied to yield modified error; and
an error format by which the error is distributed.

25 17. The system of claim 16, additionally comprising a bitmap to which reference may be made to determine to which color plane the error modification function is applied.

18. The system of claim 16, additionally comprising a matrix to provide numbers by which error is multiplied to yield modified error.

19. A processor readable medium having processor executable
5 instructions thereon which, when executed by a processor cause the processor to:

modify first and second error values to produce first and second modified error values, respectively;

base a color plane firing decision on a comparison of the first and
10 second modified error values; and

distribute the first and second error values to adjacent pixel locations on a first and a second color plane, respectively.

20. The processor readable medium of claim 19, wherein the
15 instructions also cause the processor to:

use a function to derive an error modification value; and

multiply the error modification value with the first error value in response to a positive value in a bitmap.

21. The processor readable medium of claim 20, wherein the
20 instructions also cause the processor to use a minority color plane value as an input value to the function.

22. The processor readable medium of claim 19, wherein the instructions also cause the processor to:

select, based on the value of a first and a second color value, first and
5 second weight formats, respectively, to distribute the first and second error
values, respectively, to adjacent pixel locations on the first and second color
planes, respectively.

23. The processor readable medium of claim 22, wherein the
10 instructions also cause the processor to select the first and second weight
formats based on a magnitude of the first and second modified error values,
respectively.

24. The processor readable medium of claim 19, wherein the
15 instructions also cause the processor to use a matrix to modify the first error
value and the second error value.

25. The processor readable medium of claim 19, wherein the
instructions also cause the processor to multiply the first and second error
20 values by a number derived from a matrix if a first color plane value and a
second color plane value are greater than the matrix value and greater than the
inverse matrix value, respectively.